

Claims

1. A package for containers such as bottles or cans, folded from sheet material, comprising a bottom panel, a first and second side panel connected thereto via diametrically opposed first fold lines and a first and second upper flap, connected to the respective side panels via a second and third fold line,
5 respectively, wherein the first upper flap is located on the second upper flap and at least two openings are provided in the first upper flap through which fingers can be inserted for lifting said package and the second upper flap extends at least between said openings, while, at the location of the second and third fold line over at least one part of the said second and third fold line at
10 least two layers of sheet material are provided, on and/or on both sides of said second and third fold line such that an upper longitudinal edge of at least one of the containers abuts, during use, against the innermost of said two layers of sheet material.
2. A package according to claim 1, wherein, on the side opposite the
15 second fold line, the first upper flap is connected via a fourth fold line to a first support flap which is located against the second side panel and the second upper flap is connected via a fifth fold line to a second support flap which is located against the first side panel.
3. A package according to claim 2, wherein the first support flap has
20 been fastened against the outside of the second side panel.
4. A package according to claim 2 or 3, wherein the second and fourth fold lines and the third and fifth fold line lie virtually over each other.
5. A package according to any one of the preceding claims, wherein
25 each side panel, on two opposite sides, is provided with a closing flap connected thereto via a sixth fold line, wherein the closing flaps on each side of the package jointly have a width which is at least equal to the width of the bottom panel.

6. A package according to any one of the preceding claims, wherein, via seventh fold lines extending at right angles to the first fold lines, two support closing flaps are connected to oppositely located sides of the bottom panel.
7. A package according to claim 5 or 6, wherein, via a corner flap, each 5 closing flap is connected to a support closing flap.
8. A package according to claim 7, wherein on both sides of the package, two closing flaps abut against a support closing flap, the relevant corner flaps being confined between the respective closing flaps and the support closing flaps.
- 10 9. A package according to claim 8, wherein the closing flaps are fastened, in particular glued, against the corner flaps.
10. A package according to any one of claims 5 – 9, wherein the lower edge of the closing flaps runs approximately parallel to the bottom panel.
11. A package according to any one of claims 5 – 10, wherein the closing 15 flaps on both sides of the package overlap, at least partly.
12. A package according to any one of the preceding claims, wherein, on two opposite sides, the first upper flap is connected via an eighth fold line to an upper closing flap, which upper closing flaps are fastened to the closing flaps and/or the side panels or glue flaps connected thereto.
- 20 13. A package according to any one of the preceding claims, wherein in the first upper flap, tear lines are provided extending from near an opening in a direction remote from the other opening, while, each time, between two tear lines a tear tab is provided extending in the direction of a longitudinal edge of the first upper flap.
- 25 14. A package according to claim 13, wherein the second upper flap extends substantially not below the or each tear tab.
15. A package according to any one of the preceding claims, wherein at least two rows are provided of each at least three containers, which rows extend parallel to side panels and wherein at least one and preferably each

container between a first and last container in a row abuts against the inside of said double layer of sheet material.

16. A package according to any one of the preceding claims, wherein each side panel comprises a lower panel part and an upper panel part

5 connected thereto via an eleventh fold line, said upper panel parts slightly inclining towards each other such that the upper side of the package is narrower than the bottom panel.

17. A package according to any one of the preceding claims, wherein the package is manufactured from cardboard with a specific weight of less than

10 380 gr/m², in particular less than 320 gr/m², more in particular less than 280 gr/m².

18. A package according to claim 17, wherein the cardboard has a specific weight of 250 gr/m², in particular less than 225 gr/m², more in particular 200 gr/m² and preferably 180 gr/m² or less.

15 19. A blank for forming a package according to any one of the preceding claims, comprising:

- a bottom panel

- a first and second side panel, connected to the bottom panel via first fold lines extending substantially parallel to each other;

20 - a first and second upper flap, connected to the first and second side panel, respectively, via a second and third fold line, respectively, extending approximately parallel to the first fold line;

- wherein in the first upper flap at least two openings are provided for allowing the passage of fingers, and the second upper surface has a width and form such that it can lie on or below the first upper surface, substantially between said two openings.

25 20. A blank according to claim 19, wherein, on the side located opposite the second fold line, the first upper flap is connected, via a fourth fold line, to a first support flap and/or the second upper flap is connected on the side located

30 opposite the third fold line via a fifth fold line to a second support flap, the

distance between the second and fourth fold line being virtually equal to the distance between the third and fifth fold line.

21. A blank according to claim 19 or 20, wherein:

- each side panel on two opposite sides, via a sixth fold line extending

5 approximately at right angles to the first fold lines, is connected to a closing flap, while two closing flaps, cooperating when the package is set-up, have a joint width which is at least equal to the corresponding width of the bottom panel;

- on two opposite sides of the bottom panel, via a seventh fold line

10 extending approximately at right angles to the first fold lines, a support closing flap is connected;

- via a ninth fold line, each closing flap is connected to a corner flap, which corner flap is connected, via a tenth fold line, to a support closing flap, while each respective ninth and tenth fold line intersect in a corner of the

15 bottom panel and, mutually, include an angle of less than 90 degrees, more in particular less than 60 degrees.

22. A blank according to any one of claims 19 – 21, wherein each side

panel comprises an eighth fold line, approximately parallel to the first fold lines, which divides the respective side panel in a bottom and a top side panel,

20 while the upper side panel is approximately trapezoid-shaped and the closing flaps each comprise at least an eleventh fold line, at least folding element, approximately at the location of the eighth fold line, while, preferably, a recess is provided in each closing flap, at the location of the intersection between the sixth fold line and the eighth fold line.

25 23. A blank according to any one of claims 19 – 22, wherein one of the

upper flaps, in particular the first upper flap is connected on two opposite sides via a twelfth fold line, to an upper sidewall flap, in particular a slightly trapezoid-shaped upper sidewall flap with a length, at right angles to the twelfth fold line, which approximately corresponds to the length of the sixth

fold line between the second or third fold line and the adjoining eighth fold line.

24. A blank according to any one of claims 19 – 23, wherein the blank is manufactured from cardboard, in particular solid cardboard with a specific weight of less than 380 gr/m², in particular less than 320 gr/m², more in particular less than 280 gr/m².

5 25. A blank according to claim 24, wherein the cardboard has a specific weight of 250 gr/m², in particular less than 225 gr/m², more in particular 200 gr/m² and preferably 180 gr/m² or less.

10 26. An apparatus for setting up packages according to any one of claims 1 – 18 from a blank according to any one of claims 19 – 25, wherein the blanks, during setting up of the packages are not rotated about an axis extending at right angles to the bottom panel.

27. An apparatus according to claim 26, wherein feed-through means
15 are provided for moving the blanks in a transport direction along different set-up stations, while adjacent a discharge end of the apparatus means are provided for pressing-on at least the upper flap and, optionally, closing flaps and/or upper closing flaps during gluing thereof, which means comprise press-on heads provided on a side facing the packages with recesses which, as to
20 form, approximately correspond to the relevant upper part of the package while these press-on heads are designed for movement in the transport direction during said pressing-on.